

LEPC Connections

A Virginia Local Emergency Planning Committee Newsletter

Fall 1998

SEPs - A Potential Source of Funding for LEPCs

By George Roarty

CEP Branch Manager, DES

A Supplemental Environmental Project (SEP) is defined in Virginia Code Section 10.1-1186.2 as "an environmentally beneficial project undertaken as partial settlement of a civil enforcement action and not otherwise required by law."

SEPs are designed to address the needs of the community, enhance the protection of the environment, guard the public health, and promote environmental justice. Greater emphasis is being placed on SEPs by the Virginia Department of Environmental Quality to be included in settlement agreements relating to violations of environmental laws and regulations.

According to the state code, SEPs must fall within the following categories: emergency planning and preparedness, public health, pollution prevention, pollution reduction, environmental restoration and protection, and environmental compliance promotion. Examples of emergency preparedness projects include computers and software, HAZMAT equipment, training, full-scale exercises, communications equipment, etc. As can be seen, SEPs can fulfill a variety of needs regarding equipment, training, exercising and planning.

SEPs must also be identified as unfunded needs in current local Hazardous Materials Emergency Response Plans. Although Section 303 of SARA Title III requires each LEPC evaluate the resources needed to develop, implement and exercise the emergency plan, as well as make recommendations with respect to any additional resources that may be required,

many Hazardous Materials Response Plans do not include a section that addresses resource shortfalls.

Therefore, it is recommended that all LEPCs conduct a resource needs assessment for their emergency planning district if one has not been completed. The resource needs should be listed, prioritized and incorporated, along with associated costs, into a resources needs section of the HAZMAT plan. The prioritization of the resource needs will facilitate the review and selection process by the DEQ. The listing should include a variety of projects in terms of type, size, and cost to satisfy the different types of situations that may arise. The LEPC is a good forum to conduct a resource needs assessment for the emergency planning district, as all the major emergency support functions and stakeholders are represented.

If your plan has not been reviewed in the past year, an updated plan that includes the resource needs section for the emergency planning district should be developed and forwarded to the Virginia Department of Emergency Services, Technological Hazards Division, Chemical Emergency Preparedness Branch.

If your plan has been reviewed, updated and submitted within the past year, please forward only the Resource Needs section.

Selection of a resource need as a supplemental environmental project is solely at the discretion of DEQ and the facility. SEPs are incorporated into a consent order or decree and are enforceable as any other requirement. SEP projects must serve or benefit the general area in which the violation occurred (e.g., emergency planning dis-

About This Newsletter

This newsletter is a vehicle for LEPCs to exchange information on what they're doing, as well as keep abreast of state and federal initiatives. If you think it's worthwhile, we'll continue producing it quarterly.

We need your support to make it a success. Tell us what you are doing. We'll publish any stories, initiatives, projects, studies, or issues that you think would be of interest to LEPCs and the Virginia hazardous materials response community. Please mail your comments or recommendations to:

"LEPC Connection"

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trict, immediate geographic area, river basin, ecosystem, etc.). If for some reason the geographic requirement cannot be met, the project must have some relationship to the environmental law involved with the violation.

Additional guidance will be provided to LEPCs regarding state and federal Supplemental Environmental Projects by VDES Technological Hazards Division, in cooperation with DEQ in the near future. EPA's final SEP policy, effective May 1, 1998, is available on the internet at: <http://es.epa.gov/oeca/sep/guiddoc.html>. ♦

LEPCs, Industry Test Emergency Capabilities in Joint Drill

By Charlie Martin Jr.

Hickson DanChem Corporation

Hickson DanChem Corporation conducted a joint emergency drill with Danville and Pittsylvania County this past March. The scenario tested each organization's emergency capabilities and provided valuable training to participating personnel.

The drill was the first of its kind for our local area and required extensive coordination between Hickson DanChem, state, county, and city officials. Precise logistical planning allowed the drill to coincide with regular quarterly training conducted by each agency.

Participating agencies included: Hickson DanChem Emergency Response Organization, Danville Emergency Services, Danville HAZMAT Team, Danville Fire Department, Danville Regional Medical Center, Danville Life Saving Crew, Pittsylvania County Emergency Services, Pittsylvania County Fire Marshal, HAZMAT Coordinator, Ringgold and Blairs Volunteer Fire Departments, Pittsylvania County Sheriff's Department, and Virginia State Police, as well as representatives from both LEPCs.

The drill tested all required taskings for response to an actual emergency. Some agencies used input simulations to test and evaluate their systems above and be-




Hickson DanChem's joint emergency drill with Danville and Pittsylvania Co. was the first of its kind

yond their normal activities. This additional training proved to be instrumental in identifying potential deficiencies.

The key to the drill's success was close coordination and communication between the LEPCs and their industry counterpart. A true partnership was formed as a result of the drill, one that will prove to be very beneficial in the event of an actual emergency, whether on the industrial site or in

the local community.

Hickson DanChem's President and Hickson International's CEO, both on site during the drill, commented that they had never seen so many agencies come together and work so harmoniously during a training drill.

This was definitely a standard to be emulated. It was really outstanding to see LEPCs and industry working together. 

Central Virginia HAZMAT Response Association Conducts First Meeting

By Steve De Lisi

VDES Hazardous Materials Officer

The first meeting of the Central Virginia Hazardous Materials Response Association was conducted this July at the office of the VDES in Richmond.

The association was created as an informal way for participants to meet and discuss various issues related to hazardous materials emergency response, including training programs, developing emergency operation plans, equipment specifications, and joint readiness exercises.

We welcome participation from local, state, and federal agencies, private entities, as well as members of Local Emergency Planning Committees in Central Virginia. The Association hopes to provide LEPC members with the opportunity to interact with other LEPCs and emergency response organizations from around the area.

The interaction of association participants will be encouraged through quarterly meetings and the distribution of a comprehensive mail and telephone list.

Not everyone attending association meetings will be interested in every aspect of emergency response since each organization has its own level of response capability. Therefore, a major initiative will be to establish a series of smaller subcommittees, comprised of individuals with similar interests, who can work together for a common cause. Radiological response training and in-place sheltering programs are examples of possible subcommittee projects.


During the meeting, it was suggested that representatives from various state agencies, such as VOSHA, State Police, DEQ, and the Bureau of Radiological Health, be included.

Another recommendation was to have a guest speaker for each session. These were

a few of many ideas offered by participants to enhance the value of the association.

It was also suggested that one LEPC or fire department manage the association, and that this responsibility rotate on a calendar-year basis. Management tasks would include coordination of meetings, preparation and distribution of minutes, and maintenance of the mail and telephone lists.

Offers to manage the association during 1999 will be discussed during the next meeting, scheduled for October 20, 1998, in the Richmond area.

If you would like additional information on the Central Virginia Hazardous Materials Response Association, please contact: Steve De Lisi, Virginia Department of Emergency Services, 10501 Trade Court, Richmond, VA 23236, Phone (804) 897-6572, Fax (804) 897-6576 

DuPont Spruance Plant Develops a Risk Management Plan

By Larry Nelson

Environmental Engineer, DuPont Spruance Plant

EPA regulations at 40 CFR, Part 68, are aimed at implementing the Clean Air Act, Section 112(r). The final regulation was published in the Federal Register on June 20, 1996, and requires certain facilities to file a formal "Risk Management Plan" with the EPA, generally no later than June 21, 1999.

When we first examined this regulation, we found that a few of our processes fell under its coverage. We had chemicals on site that were listed in the regulation and that existed in quantities greater than the threshold values specified in the regulation.

If you have a covered process, you must do a worst-case analysis. Assume, for instance, that the largest vessel holding a covered chemical fails completely and spills its contents immediately.

Then, using criteria specified in the regulation, calculate the resulting "distance to endpoint" of the material. Since the criteria specified in the regulation are conservative, the distance calculated can go quite far from the source. This can be of concern, both to the facility itself and to the general public that might be affected by such a release.

The regulation then specifies a calculation of a more realistic (based on more real life criteria) "alternative scenario." This calculation can be made on the assumption that systems installed to control a release – like automatic shutoffs – do their jobs as designed.

The purpose of both the worst-case and alternative scenarios is to provide a framework so that emergency preparedness can be better understood by the facility and the local community, including the LEPC.

The regulation requires documentation of the calculations for worst-case and alternative scenarios, accident history, and formal Prevention Plans and Emergency Response Plans, to be submitted in the form of a Risk Management Plan to the EPA.

In addition, the regulation requires that Emergency Response Plans be coordinated with the LEPC. While the information submitted to the EPA will be made available to the public, the facility is not specifically required to review their data with the public.

Our Site's Approach

Dupont's philosophy is that we operate at the consent of the local communities where our facilities are located. Consistent with that philosophy, we intended to communicate our scenarios and prevention plan items prior to the required submission of the data to the EPA.

We realized there was a need to educate people about what the regulation is and what it requires. We have a standing committee made up of local community and business representatives that we meet with periodically called the Community Advisory Panel (CAP). After determining that we did have some processes covered by the regulation, we held a meeting with the CAP and described the basics of the regulation.

One member of our CAP is also the leader of our county's LEPC, and she suggested we present similar information to a joint meeting of LEPCs in our area.

We made the presentation and described the regulation and our calculated scenarios. This was a great opportunity to communicate to a wider audience, and we had a very good question and answer session at the end of the meeting.

We have since met again with our local CAP and continued

our discussions of the regulation, focusing on a review of the regulation and the specific scenarios that we had calculated. We will follow up with a description of all the prevention measures we take at our site to avoid any catastrophic releases.

In addition, as we have communicated to the CAP and the LEPCs, we have asked for suggestions regarding other groups in the local community with which we might communicate.

Results So Far

This process has been good for us and for the community. We have had the opportunity to reexamine the need for the type of chemicals covered by the regulation and, in one case, we have been able to find a substitute chemical that has no off-site impact.

The community and the LEPCs have had the opportunity to better understand the requirements of the regulation and to engage in helpful discussions regarding emergency preparedness and prevention. We intend to continue these discussions so the local community will not be "surprised" when we submit our data to the EPA.

Area of Concern

There is one area of EPA's interpretation of the regulation that is cause for concern. The regulation requires the information submitted by the source be made available to the public by the EPA.

EPA's current recommendation is to post it on the Internet. The Internet's unlimited access would make the information available to anyone, worldwide.

The purpose of the law and the regulation is to make the affected public aware of the potential hazards from sources within their community through the LEPC's Emergency Preparedness Plans.

Having information on specific chemicals available on a medium such as the World Wide Web raises concerns that potential terrorist organizations or individuals searching for the best places to further terrorist intentions will be able to access that information.

This issue was recently raised by the FBI, which came to a similar conclusion regarding the misuse of that information.

We hope, in the final analysis, the EPA will conclude that some form data protection should be considered and that the data's availability will be limited to where it is most needed, in the local community. □



Risk Analysis in the Transportation of Hazardous Materials

By Nell Rose Jarvis

Fairfax County Fire and Rescue Department

The Fairfax Joint Local Emergency Planning Committee (FJLEPC) recently completed a risk analysis of the transportation of hazardous materials throughout the Fairfax Joint Local Area Planning District.

The purpose of the study was to identify the amount and types of hazardous materials moving through the Planning District and evaluate the risk to the community.

With the exception of pipelines, hazardous materials in transport generally stay within the Planning District for a short period of time, making them more difficult to identify, quantify, and control.

The actual Planning District includes the County of Fairfax, the City of Fairfax, the Town of Vienna, and the Town of Herndon, encompassing 399 square miles, and housing more than 1.2 million people.

The Planning District has a transportation system that includes Interstate 95, Interstate 395, Interstate 495, U.S. Route 1, the Fairfax County Parkway, two airports, CSX and Norfolk-Southern Railways, five underground pipelines, and borders the Potomac River ship channel.

The major network of transportation routes within the Planning District is a concern because hazardous materials can and do move freely and are not easily identifiable. Interstate 95 alone carries one of the highest interstate traffic volumes in the United States, and the risk associated with hazardous materials transportation represents a significant threat.

Although the county has 55 Critical Hazard Facilities and three petroleum tank farms, 34 of those facilities report sulfuric acid batteries associated with telephone switching stations or computer backup systems.

Ammonia and petroleum storage represents the majority of the remaining extremely hazardous substances within the Planning District. The FJLEPC felt that the high volume of traffic on the major transportation routes, coupled with the heavy tanker traffic moving in and out of the tank farms on a daily basis, needed to be thoroughly evaluated for risk.

The study was done in three phases over a three-year period and had a long-term goal of developing a system for consistent, continuous data collection, manage-



ment, and analysis.

Phase I of the study concentrated on Area IV of the Planning District. The county is divided into four major planning areas and Area IV was selected because of its concentration of critical hazard facilities and major transportation routes. It contains 15 of the 55 critical hazard facilities, a petroleum tank farm, a major propane storage facility, two pipelines, one airport, Interstate 95, Interstate 395, Interstate 495, U.S. Route 1, the Parkway, two rail lines, and a river route.

Each mode of transportation – truck, rail, pipeline, and ship – was analyzed to determine the type, age, and source of hazardous materials transportation data available and to determine if that information was relevant to the current study.

In addition, Phase I addressed the issue of raw data collection, management, and analysis. Phase I identified sources of existing data and recommended that a computerized data management system be developed that would analyze risk, have the expectation of providing real-time decision support information, and possess the ability to integrate with the fast growing state and federal initiatives.

Phase II of the study concentrated on data collection of the routes, frequency, and volume of shipments of hazardous materials being transported through Area IV by air, rail, water, pipeline, and truck.

Sources of information included U.S. DOT, USOSHA, DOD, FEMA, VDOT, local police and fire departments, prior studies, and an actual count of placarded trucks.

Phase II also examined the hazardous materials incidents within Area IV of the Planning District over the past five years. Once the information was collected, it was analyzed from a risk perspective and from a data management perspective. Phase II recommended that hazardous materials incident and transport data be collected

in Areas I, II, and III, and managed through a Geographic Information System (GIS) with incident management capabilities.

To achieve maximum efficiency, the study recommended that the information be kept current and analyzed frequently to identify which transportation modes, locations, and seasonal variations carry higher than average statistical risk to public health and the environment.

Phase III extended the data collection and analysis throughout the entire Planning District and specifically examined incident management software programs. CAMEO, Archie, and EIS/GEM were reviewed. EIS/GEM was selected because of its ability to manage base information such as Tier IIs, multiple response plans, and chemical data; to provide real-time incident management supported by plume modeling; and to integrate with the local police department and the Virginia Department of Transportation EIS/GEM programs.

The study was funded through grants from the U.S. Department of Transportation and contributions from the FJLEPC members and the Fairfax County Fire and Rescue Department.

Phase I was completed by representatives of The Center for Transportation and Land Policy, George Mason University. Phase II and Phase III were completed by the Center for Basic and Applied Science, George Mason University.

Copies of the completed study may be obtained by contacting Nell Rose Jarvis at Fairfax County Fire and Rescue Department, 4100 Chain Bridge Road, 4th Floor, Fairfax, Virginia 22030, telephone: (703) 246-3971. □

Looking for a Logo

In order to enhance their identity within their communities and the state, some LEPCs have expressed an interest in developing a logo.

If the majority of LEPCs support the concept, a committee can be established under the VERC to develop one.

Fax suggestions to VDES, Technological Hazards Division, Attn: LEPC Connection at (804) 897-6576.